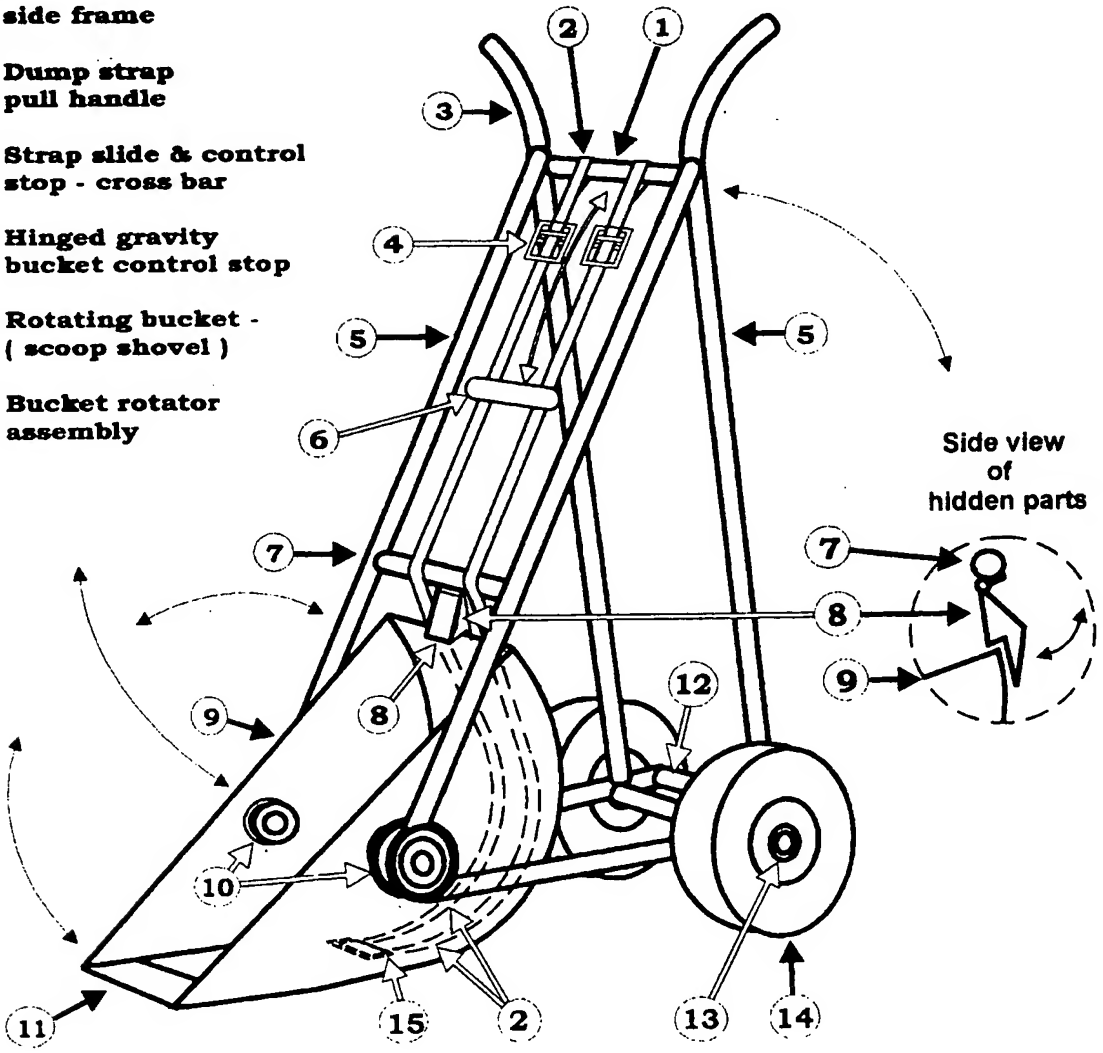
FIGURE #1

Mechanical all season h vel.

M chanical advantag - human p wered -
Mini front nd loader . For snow, soil , grav ls etc. -
Countl ss - industry, home and farm applications.
Fully proto-type tested and proven.

1. Hip/thigh push bar
2. Dump bucket hand pull straps
3. Frame handle control grips
4. dump strap adjustment buckle
5. side frame
6. Dump strap pull handle
7. Strap slide & control stop - cross bar
8. Hinged gravity bucket control stop
9. Rotating bucket - (scoop shovel)
10. Bucket rotator assembly
11. Re-enforsed forward bucket edge
12. frame & foot push bars
13. Axle assembly
14. Bering wheels - air filled tires
15. Dump strap connector bracket



Office d la Propriété Intellectuell du Canada
Un organisme d'Industrie Canada

anadian ntellectual Property Office
An agency of Industry Canada

CA 2323917 A1 2002/04/27

(21) 2 323 917

(12) DEMANDE DE BREVET CANADIEN
CANADIAN PATENT APPLICATION

(13) A1

(22) Date de dépôt/Filing Date: 2000/10/27

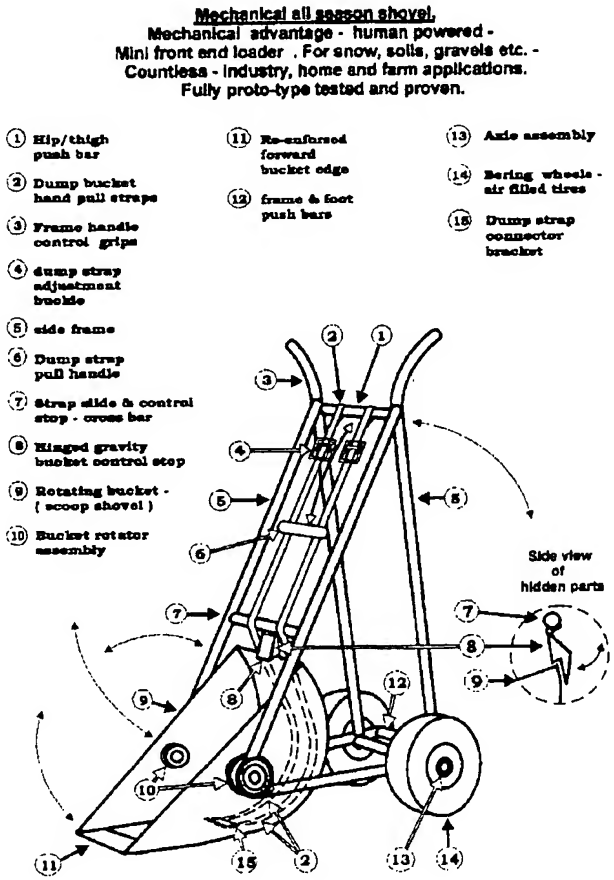
(41) Mise à la disp. pub./Open to Public Insp.: 2002/04/27

(51) Cl.Int.^{7}/Int.Cl.^{7} E01H 5/00, E01H 5/02, E02F 3/00

(71) Demandeurs/Applicants:
OLSEN, ELIZABETH, CA;
GARDNER, GERRY, CA

(72) Inventeurs/Inventors:
OLSEN, ELIZABETH, CA;
GARDNER, GERRY, CA

(54) Titre : GRANDE PELLE MECANIQUE " ALLY CAT "
(54) Title: THE ALLY CAT SUPER SHOVEL



(57) Abrégé/Abstract:
This invention relates to an all season mufti-purpose shovel and wheel barrow combination, in the fashion of a human powered mini front end loader. The apparatus is comprised of a multi-medium container for scooping snow, gravels, soils etc. This

CA 2323917 A1 2002/04/27
(21) 2 323 917
(13) A1

(57) Abrégé(suite)/Abstract(continued):
container (9) is moved along the ground or at varying heights scooping up any loose piled màterial to be shoveled and transported to another location. The container is attached to a wheeled frame (5,14), which is pushed by handles (3) similar to a wheel barrow, after said frame is rotated to a horizontal position. Upon reaching a destination the container [shovel or bucket - (9)] can be dumped efficiently by rotation through the use of dump straps (2). The dump straps are attached to the container dump strap connector bracket (15), and the frame hip thigh push bar (1) at the other end. The container is rotated by pulling the dump strap handle (6), sliding said straps over a directional control cross bar (7). The hinged gravity stop (8) locks the container while in the vertical position to allow filling. When the unit is rotated to the horizontal transport position, the loads center of gravity is transferred to the rear of the container helping balance the unit for increased mechanical advantage. This shift of weight also trips the hinged gravity stop allowing rotation of the container for dumping. The container is held in place and rotated on two aligned rotation assemblies (10) which are connected to the frame. The re-enforced container forward edge (11) is driven into the material to be transported by pushing on the frame foot push bar area between the wheels (14). Adjustment of the container maximum rear rotation angle, is done with the dump strap buckles (4).

Abstract

This invention relates to an all season multi-purpose shovel and wheel barrow combination, in the fashion of a human powered mini front end loader. The apparatus is comprised of a multi-medium container for scooping snow, gravels, soils etc. This container (9) is moved along the ground or at varying heights scooping up any loose piled material to be shoveled and transported to another location. The container is attached to a wheeled frame (5,14), which is pushed by handles (3) similar to a wheel barrow, after said frame is rotated to a horizontal position. Upon reaching a destination the container [shovel or bucket - (9)] can be dumped efficiently by rotation through the use of dump straps (2). The dump straps are attached to the container dump strap connector bracket (15), and the frame hip thigh push bar (1) at the other end. The container is rotated by pulling the dump strap handle (6), sliding said straps over a directional control cross bar (7). The hinged gravity stop (8) locks the container while in the vertical position to allow filling. When the unit is rotated to the horizontal transport position, the loads center of gravity is transferred to the rear of the container helping balance the unit for increased mechanical advantage. This shift of weight also trips the hinged gravity stop allowing rotation of the container for dumping. The container is held in place and rotated on two aligned rotation assemblies (10) which are connected to the frame. The re-enforced container forward edge (11) is driven into the material to be transported by pushing on the frame foot push bar area between the wheels (14). Adjustment of the container maximum rear rotation angle, is done with the dump strap buckles (4). (Fig. 1)